

April 5, 2013

Mr. Michael Robertson, Program Manager  
Gas Safety and Reliability Branch  
Safety and Enforcement Division (SED)  
State of California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102-3298

Re: Response of Southern California Edison Company to General Order (GO)  
112-E Audit Findings of the Catalina District Petroleum Gas Distribution  
System, Santa Catalina, Island, California

Dear Mr. Robertson:

Thank you for your March 5, 2012 letter addressed to Mr. Brice Babbitt of Southern California Edison (SCE). Your letter presented findings (identified as letters A-G) and recommendations (identified as letter H) from the audit performed by Matthewson Epuna and Michelle Wong of the SCE petroleum gas distribution system on Catalina Island (Catalina Gas). The audit was conducted during the period May 1-4, 2012. In your letter, you requested SCE to provide a written response to the Safety and Enforcement Division (SED) addressing proposed corrective actions and address the issues of concern noted in your letter. Your letter also stated that SED staff has the authority to issue citations for each violation found during the audit, and that SED will notify SCE of the enforcement action it plans to take after it reviews SCE's audit response.

This audit response letter identifies the corrective actions SCE is proposing to take and addresses the issues of concern in your letter. As a general matter, it is important to note that Catalina Gas began using the SAP system during the fourth quarter of 2012. All Catalina Gas distribution assets are represented in the system along with accompanying maintenance plans, which generate work orders and notifications responsive to the regulations cited in your letter. Specific corrective action issues are addressed in detail below. SCE reserves all of its rights to respond accordingly to any potential forthcoming enforcement action.

SED Finding A:

**A. Operation and Maintenance and Emergency Review**

Title 49 CFR, §192.605(a) states:

*(a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted."*

SCE did not conduct the required annual review of its written procedures for conducting operations and maintenance activities and emergency response from 2008 through 2010. Therefore, SCE is in violation of G.O. 112-E, Reference 49 CFR, §192.605(a).

SCE Response to SED Finding A:

SAP has been utilized to create an automatic generating preventative maintenance work order to perform the review and updating of the manual at intervals not exceeding 15 months and at least once each calendar year. For 2012, review and revisions were completed on April 27, 2012. For 2013, the review and revisions have been completed. A copy of the preventative maintenance plan is provided in Attachment A.

Going forward, the Catalina Gas compliance analyst will generate a monthly report from SAP to ensure all compliance-related work orders and notifications are completed on time. The Catalina Gas compliance analyst will review work orders and notifications to ensure completion of all documentation, review of documentation by the superintendent, and the closing of work orders. The compliance analyst will report tracking information directly to the Catalina District Manager. In addition, as part of SCE's bi-annual Environmental Health & Safety (EH&S) compliance facility assessment, SCE's Transmission and Distribution Business Unit (TDBU) safety and environmental specialist (SES) will verify completion of the compliance analyst reporting and tracking activities. This will provide an additional layer of independent review to ensure compliance.

If supervisory review creates secondary work activities, work orders or notifications will be generated to track and complete secondary activities via the same procedure used to complete and track primary work orders and notifications.

SED Finding B:

**B. Distribution Pipeline Patrolling**

Title 49 CFR, Part 192 Section 192.13(c) states:

*(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part."*

SCE Catalina District Petroleum Gas Pipeline System STANDARD PROCEDURE (SP) – 413 Section 3.0 states:

"A majority of the petroleum gas pipeline distribution system is within the City of Avalon area, which is geographically small (1.3 square miles), and there is little distinction between the business and non-business districts; therefore to avoid having two different patrol frequencies, all the mains will be patrolled at the more restrictive business district time-frame (quarterly). This frequency may be increased on any segment, at any time, due to increased activity or other special conditions."

SCE did not have patrolling records to indicate that it patrolled its system during the second and third quarters of 2010. Therefore, SCE is in violation of G.O. 112-E, Reference 49 CFR, §192.13(c).

SCE Response to SED Finding B:

SCE did in fact patrol its system in the third quarter 2010 in compliance with SP 413, Section 3.0; a copy of a record documenting that patrol is presented in Attachment B. SCE was unable to locate formal documentation for the relevant patrol during the second quarter of 2010. It is important to note, however, that although not always formally documented in the past, SCE conducts patrols on a continuous basis. The majority of the pipeline system is within the City of Avalon area, which is geographically small (1.3 square miles). Gas crew members work in this area on a daily basis while conducting business for both the gas and water utilities (SCE Gas employees also operate the water utility for the entire Island of Catalina). In addition, the SCE field services representative reads all gas meters on a monthly basis and is qualified to turn gas meters on and off, light pilot lights, and recognize gas leaks.

SAP provides an automatic generating preventative maintenance work order to perform patrolling (main inspection) quarterly. A copy of the preventative maintenance plan is provided in Attachment B.

Going forward, the Catalina Gas compliance analyst will generate a monthly report from SAP to ensure all compliance-related work orders and notifications are completed on time. The Catalina Gas compliance analyst will review work orders and notifications to ensure completion of all documentation, ensure review of documentation by the superintendent, and the closing of work orders. The compliance analyst will report tracking information directly to the Catalina District Manager. In addition, as part of the bi-annual EH&S compliance facility assessment, the TDBU

safety and environmental specialist (SES) will verify completion of the compliance analyst reporting and tracking activities. This will provide an additional layer of independent review to ensure compliance.

If supervisory review creates secondary work activities, work orders or notifications will be generated to track and complete secondary activities via the same procedure used to complete and track primary work orders and notifications.

SED Finding C:

**C. Valve Maintenance**

Title 49 CFR, Part 192 Section 192.747(a), states:

- (a) Each valve, the use of which may be necessary for the safe operation of a distribution system, must be checked and serviced at intervals not exceeding 15 months, but at least once each calendar year."*

SED staff discovered that SCE performed annual valve inspections in November 2010 (11/1-5/10) and its subsequent annual valve inspections were not performed until January and February 2012 (1/7/12 & 2/4&10-13/12). SCE did not conduct any valve inspection in 2011. Therefore, SCE gas valve annual re-inspection interval exceeded the once each calendar year inspection requirement of G.O. 112-E, Reference 49 CFR, §192.747(a) in 2011.

SED also noted that SCE conducted valve inspections of all of its 86 valves on February 2-19, 2009 and did not inspect the valves again until November 1-5, 2010, thereby, exceeding the required 15-month valve inspection interval for all the valves in its Catalina petroleum gas distribution system. As a result, SCE is in violation of G.O. 112-E, Reference 49 CFR, §192.747(a) in 2010.

SCE Response to SED Finding C:

SCE performed the following valve inspections over the period 2009 to 2012:

Year	Period	Notes
2009	January to February, 2009	On time
2010	November, 2010	Exceeded 15 months from 2009 inspection.
2011	January to February, 2012	Performed outside 2011 calendar year.
2012	October to November, 2012	On time

SAP provides an automatic generating preventative maintenance work order to perform annual maintenance and inspection at intervals not exceeding 15 months and at least once each calendar year for each valve. SCE now has 95 main valves across Catalina Island. SAP has been kept up to date to reflect the valve assets. The related SAP maintenance plan has also been updated to account for the 95 valves. A copy of the preventative maintenance plan is provided in Attachment C.

Going forward, the Catalina Gas compliance analyst will generate a monthly report from SAP to ensure all compliance-related work orders and notifications are completed on time. The Catalina Gas compliance analyst will review work orders and notifications to ensure completion of all documentation, ensure review of documentation by the superintendent, and the closing of work orders. The compliance analyst will report tracking information directly to the Catalina District Manager. In addition, as part of the bi-annual EH&S compliance facility assessment, the TDBU

safety and environmental specialist (SES) will verify completion of the compliance analyst reporting and tracking activities. This will provide an additional layer of independent review to ensure compliance.

If supervisory review creates secondary work activities, work orders or notifications will be generated to track and complete secondary activities via the same procedure used to complete and track the primary work orders and notifications. TDBU considers this item closed at this time.

SED Finding D:

**D. Odorization Monitoring**

SCE STANDARD PROCEDURE (SP)–409 Section 4.0, states:

*“According to federal regulations, the odor must be readily detectable when the propane concentration in air is at 0.42% (one-fifth LEL) or less. The LEL of propane in air is 2.1%. Using a portable odor concentration analyzer, the coordinator will conduct quarterly sampling to confirm that the propane is readily detectable by smell at this concentration. The results of the quarterly field sampling shall be recorded on the Field Odor Verification Form as presented in Attachment 409-B.”*

SED discovered that SCE currently conducts periodic sampling with a portable odor concentration analyzer to confirm that odorant in its propane gas is readily detectable by smell at the proper concentration of propane gas in air. SCE did not have records to demonstrate that it conducted four quarterly sampling for the year 2010 and 2011 as defined in its SP – 409 Section 4.0. Therefore, SCE is in violation of G.O. 112-E, Reference 49 CFR, §192.13(c) for not following its procedures.

SCE Response to SED Finding D:

The following chart summarizes when SCE conducted odor checks for the period 2010 to 2011:

Year	Period
2010	February 18
2010	September 23
2010	December 15
2011	March 7
2011	June 14
2011	October 19

Odor check field forms for the above listed dates are presented in Attachment D.

SAP provides an automatic generating preventative maintenance work order to perform quarterly field sampling. Copies of the preventative maintenance work orders are provided in Attachment D.

Going forward, the Catalina Gas compliance analyst will generate a monthly report from SAP to ensure all compliance-related work orders and notifications are completed on time. The Catalina Gas compliance analyst will review work orders and notifications to ensure completion of all documentation, ensure review of documentation by the superintendent, and the closing of work orders. The compliance analyst will report tracking information directly to the Catalina District Manager. In addition, as part of the bi-annual EH&S compliance facility assessment, the TDBU

safety and environmental specialist (SES) will verify completion of the compliance analyst reporting and tracking activities. This will provide an additional layer of independent review to ensure compliance.

If supervisory review creates secondary work activities, work orders or notifications will be generated to track and complete secondary activities via the same procedure used to complete and track primary work orders and notifications.



SED Finding E:

### **E. Annual Leak Surveys**

Title 49 CFR, §192.723(b)(1), states:

*"(b) The type and scope of the leakage control program must be determined by the nature of the operations and the local conditions, but it must meet the following minimum requirements:*

- (1) A leakage survey with leak detector equipment must be conducted in business districts, including tests of the atmosphere in gas, electric, telephone, sewer, and water system manholes, at cracks in pavement and sidewalks, and at other locations providing an opportunity for finding gas leaks, at intervals not exceeding 15 months, but at least once each calendar year."*

SED discovered that SCE did not conduct a leak survey with leak detector equipment in its entire gas distribution facilities within the Catalina business districts in 2009. SCE informed SED staff that it recognized this requirement but due to an extenuating circumstances which made SCE's leakage survey contractor unable to visit the Island to conduct the business district calendar year survey until the beginning of the next calendar year. SED staff reminded SCE staff that irrespective of the circumstances, it was imperative that business districts shall be leak surveyed every calendar year but not to exceed 15 months. Therefore, SCE is in violation of G.O. 112-E, Reference 49 CFR, Part 192 Section 192.723(b)(1).

SCE Response to SED Finding E:

As noted by SED, the 2009 leak survey was not conducted within the calendar year because the leak survey contractor was not available, but the survey was completed as soon as possible and within the 15-month time period. The following chart summarizes SCE conducted leak surveys for the period 2008 to 2009:

Year	Period	SED Comment
2008	December 8 to 11	On time
2009	January 10 to 15, 2010	Performed outside 2009 calendar year.

Although not always formally documented in the past, system monitoring is performed on a frequent basis. The majority of the pipeline system is within the City of Avalon area, which is geographically small (1.3 square miles). Gas crew members work in this area on a daily basis while conducting business for both the gas and water utilities (SCE Gas employees also operate the water utility for the entire Island of Catalina). In addition, the SCE field services representative reads all gas meters on a monthly basis and is qualified to turn gas meters on and off, light pilot lights, and recognize gas leaks.

SAP provided an automatic generating preventative maintenance work order to perform the leak survey annually. A copy of the preventative maintenance plan is provided in Attachment E.

Going forward, the Catalina Gas compliance analyst will generate a monthly report from SAP to ensure all compliance-related work orders and notifications are completed on time. The Catalina Gas compliance analyst will review work orders and notifications to ensure completion of all documentation, ensure review of documentation by the superintendent, and the closing of work orders. The compliance analyst will report tracking information directly to the Catalina District Manager. In addition, as part of the bi-annual EH&S compliance facility assessment, the TDBU safety and environmental specialist (SES) will verify completion of the compliance analyst reporting and tracking activities. This will provide an additional layer of independent review to ensure compliance.

If supervisory review creates secondary work activities, work orders or notifications will be generated to track and complete secondary activities via the same procedure used to complete and track primary work orders and notifications.

SED Finding F:

**F. Welding Procedure Qualifications**

1. G.O. 112-E, Reference 49 CFR, Part 192 Section 192.225 states:

*"(a) Welding must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 (incorporated by reference, see §192.7) or section IX of the ASME Boiler and Pressure Vessel Code "Welding and Brazing Qualifications" (incorporated by reference, see §192.7) to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify welding procedures shall be determined by destructive testing in accordance with the applicable welding standard(s).*

*(b) Each welding procedure must be recorded in detail, including the results of the qualifying tests. This record must be retained and followed whenever the procedure is used."*

SED discovered that SCE hired a welding contractor to perform welding on its gas distribution pipeline in 2009 but did not have a written qualified welding procedure or required a qualified welding procedure from the welding contractor that complied with Title 49, CFR §192.225. Therefore, SCE is in violation of G.O. 112-E, Reference 49, CFR §192.225.

2. In addition, Title 49, CFR, Part 192 Section 192.227 states:

*"(a) Except as provided in paragraph (b) of this section, each welder must be qualified in accordance with section 6 of API 1104 (incorporated by reference, see §192.7) or section IX of the ASME Boiler and Pressure Vessel Code (incorporated by reference, see §192.7). However, a welder qualified under an earlier edition than listed in §192.7 of this part may weld but may not re-qualify under that earlier edition.*

*(b) A welder may qualify to perform welding on pipe to be operated at a pressure that produces a hoop stress of less than 20 percent of SMYS by performing an acceptable test weld, for the process to be used, under the test set forth in section I of Appendix C of this part. Each welder who is to make a welded service line connection to a main must first perform an acceptable test weld under section II of Appendix C of this part as a requirement of the qualifying test."*

SED discovered that the welding contractor that SCE hired in 2009 did not have a written record of the welder's qualification. It is a requirement that welding must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104. Therefore, SCE is in violation of G.O. 112-E, Reference 49, CFR §192.227.

SCE Response to SED Finding F1:

Due to infrequent need, the small size of the Distribution System, the small number of employees and the frequency of welding recertification intervals (every 6 months), SCE Gas employees do not perform welding operations on the Distribution System. All welding activities are performed by contractor ARB Inc., located in Lake Forest, California. SCE Standard Procedure

458 *Contactor Qualification Program* states that to be considered as a qualified welder, a contractor must be certified by Southern California Gas Company (SoCalGas) in accordance with welding procedures qualified by SoCalGas. In 2009, ARB Inc. employees Messrs. Luis Vega and Marcos Villegas butt-welded a 2-inch service tee to the gas main to install a new gas service line for the Los Angeles County Lifeguard Building. The SoCalGas welding procedure utilized for the project is presented in Attachment F.

SCE Response to SED Finding F2:

In 2009, both ARB employees Messrs. Vega and Villegas were certified welders for SoCalGas for oxy fuel welding (OFW) butt-welds up to two inches. A list of SoCalGas qualifications of all ARB employees are presented in Attachment F. Qualifications for Messrs. Vega and Villegas are listed on pages 5 and 6, respectively. A copy of the email sent in 2009 that forwarded the 2009 qualification list is also presented in Attachment F.

SED Finding G:

**G. Public Awareness Program**

Title 49, CFR Section 192.616, states:

*" (a) Except for an operator of a master meter or petroleum gas system covered under paragraph (j) of this section, each pipeline operator must develop and implement a written continuing public education program that follows the guidance provided in the American Petroleum Institute's (API) Recommended Practice (RP) 1162 (incorporated by reference, see §192.7).*

*(b) The operator's program must follow the general program recommendations of API RP 1162 and assess the unique attributes and characteristics of the operator's pipeline and facilities.*

*(c) The operator must follow the general program recommendations, including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety.*

*(d) The operator's program must specifically include provisions to educate the public, appropriate government organizations, and persons engaged in excavation related activities on;*

*(1) Use of a one-call notification system prior to excavation and other damage prevention activities;*

*(2) Possible hazards associated with unintended releases from a gas pipeline facility;*

*(3) Physical indications that such a release may have occurred;*

*(4) Steps that should be taken for public safety in the event of a gas pipeline release; and*

*(5) Procedures for reporting such an event...*

*(j) Unless the operator transports gas as a primary activity, the operator of a master meter or petroleum gas system is not required to develop a public awareness program as prescribed in paragraphs (a) through (g) of this section. Instead the operator must develop and implement a written procedure to provide its customers public awareness messages twice annually. If the.... "*

SED discovered that SCE does not have a Public Awareness Program. SCE only has a written Public Awareness Message that is based on Title 49, CFR §192.616(j). However, Title 49, CFR §192.616 (j) is an exception that is reserved for operators of master-metered systems or operators of petroleum gas systems that do not transport gas as a non-primary activity. SCE transports petroleum gas on Catalina Island as a primary activity. Therefore, SCE is in violation of G.O. 112-E, Reference 49, CFR §192.616(a), and must establish a complete Public Awareness Program that addresses requirements of paragraphs (a) through (i). Please advise SED on SCE's plan and schedule to implement a full Public Awareness Program for its Petroleum Gas Pipeline Distribution system in Catalina Island.

SCE Response to SED Finding G:

SCE believes that 49 CFR 192.616(j) is applicable to its intrastate, petroleum gas distribution system. During the audit, SCE and SED discussed the meaning of the statute, and specifically the appropriate definitions of “transport” and “transportation of a gas” as presented in 49 CFR 192.3 Definitions (“*Transportation of a gas means the gathering, transmission, or distribution of gas by pipeline or the storage of gas, in or affecting interstate or foreign commerce.*”) SCE’s Catalina Gas operation does not “transport” gas in a manner that can reasonably interpreted as “in or affecting interstate commerce.” To the contrary, SCE’s Catalina Gas operation only engages in the *intraisland* distribution of petroleum gas. Consequently, and in compliance with 49 CFR 192.616(j), SCE provides its customers public services messages twice annually. We discussed our application of the requirements of 49 CFR 192.616 with SED during the audit, and the SED representative indicated he would provide guidance in the near future on this subject after the field audit was completed. Instead, no guidance was provided by SED on this issue until the issuance of its March 5, 2013 audit compliance letter.

The information presented in the March 5, 2013 letter does not provide the promised guidance. It is important to note that SCE’s Catalina Gas operation has only 1,300 customers. Our top priority is always safety, but SCE notes that small, low pressure distribution systems are much less complex than large, high-pressure interstate pipelines to which the majority of the provisions of 49 CFR 192.616 apply. SCE believes that providing public awareness messages twice annually and participating in the mandated “Dig Alert” one-call notification system reasonably complies with its statutory and safety obligations, while balancing the need for cost-based just and reasonable rates. Notwithstanding the foregoing, going forward SCE agrees to implement a Public Awareness Program. A copy of the Public Awareness Program Manual is provided in Attachment G. It is currently undergoing revision and expected to be issued by June 3, 2013.

## SED Recommendations (Section H) and SCE's Responses:

### SED Recommendation H1:

The current leak repair report is inadequate. SED staff recommends that SCE establish a leak repair report that captures pertinent information about what was done, probable cause of the leak, material involved and etc. SCE should reference and integrate this data in its Distribution Integrity Management Program (DIMP) risk assessment.

### SCE Response to SED Recommendation H1:

The identification and repair of all leaks involves a summary of the repair, an assessment of the cause, and the interpolation of information to identify, as best as one can, elevated risks for further leaks and implement appropriate mitigation measures. This process has already been integrated into the DIMP.

SED Recommendation H2: SED staff recommends that SCE review and improve its DIMP plan and program implementation by addressing the following:

SED Recommendation H2a): SCE should revise its DIMP to assign roles and responsibilities to certain groups/people/positions.

SCE Response to SED Recommendation H2a): SCE acknowledges recommendation.

SED Recommendation H2b): SCE should incorporate the historical data it has gathered on its gas pipeline distribution system (e.g. unstable earth area).

SCE Response to SED Recommendation H2b): SCE acknowledges recommendation.

SED Recommendation H2c): SCE should capture the material type data, location of pipeline, etc. especially for new installations.

SCE Response to SED Recommendation H2c): SCE acknowledges recommendation.

SED Recommendation H2d): SCE should revise its DIMP plan to include the data gathering process and who will execute data gathering and integrations (e.g. planning will provide superintendent with location of line, material type and etc.).

SCE Response to SED Recommendation H2d): SCE acknowledges recommendation.

SED Recommendation H2e): SCE should revisit its DIMP plan to ensure that it has knowledge of known and unknown data and process to identify and address the risk these data or lack of may pose to its gas distribution system. Develop a process from reasonably available information to address the presence of materials, (e.g. Aldyl A PE pipe) and assess the applicable threats and risks to its gas distribution pipeline.

SCE Response to SED Recommendation H2e): SCE acknowledges recommendation.

SED Recommendation H2f): SCE should review and revise its DIMP plan to address the probable impact of known or unknown petroleum gas condensation in a low pressure distribution pipeline polyurethane system.

SCE Response to SED Recommendation H2f): SCE acknowledges recommendation.

Very truly yours,

*/s/ Ronald Hite*

Ronald Hite  
District Manager Catalina

Attachments